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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,717	08/17/2001	Matthias Huctsch	30014200-1013	6215

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EXAMINER

WU, QING YUAN

ART UNIT	PAPER NUMBER
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2194

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/932,717	Applicant(s) HUETSCH'ET AL.	
	Examiner Qing-Yuan Wu	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. Claims 1-26 are pending in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following claim language is indefinite:

- i. As per claim 1, it is uncertain whether “the request” to the load balancing master on line 8 refers to “a request” received from the client on line 5 (i.e. applicant’s specification [PG Pub 2002/0049842, paragraphs 53-54, 62 and 65] indicated a client request received from client and selection request generated from load balance slave to load balance master as distinct requests. If they are different then applicant is suggested to use proper terms to distinguish the different requests). For examination purpose, the requests are treated as different requests. As to claims 5, 11, 14, 18, 22 and 26, they are rejected for similar reason.
- ii. As per claim 11, it is uncertain whether “an external source” refers to “a load balancing master server” (i.e. if they are the same then said/the should be

used, and “the load balancing master sever should be used throughout the claims).

For examination purpose they will be treated as the same.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al (hereafter He) (U.S. Patent 6,671,259) in view of Zisapel et al (hereafter Zisapel) (U.S. Patent 6,249,801).

6. He and Zisapel were cited in the last office action.

7. As to claim 5, He teaches the invention substantially as claimed including a method in a data processing system having a first and a second load balancing server and having a plurality of processing servers, the method comprising the steps of:

receiving by the first load balancing server a request to perform a processing [col. 3, lines 55-56; 21, Fig. 2];

sending the request from the first load balancing server to the second load balancing server (different instances of the same request) [col. 3, lines 44-49; 23, Fig. 2];

determining a load of each of the plurality of processing servers by the second load balancing server [col. 4, lines 5-12] and selecting by the second load balancing server a selected one of the plurality of processing servers that is suitable for performing the processing, wherein the selection is performed based on the load of each of the plurality of processing servers [col. 4, lines 41-46; 25, Fig. 2]; and

sending by the second load balancing server to the selected one of the plurality of processing servers an indication to perform the processing [col. 4, lines 1-4, 46-49].

8. He does not specifically teach sending an identifier of the selected one of a plurality of processing servers from the second load balancing server to the first load balancing server.

However, He disclosed a scenario where the function of the arrangement for communications between client and one of the servers depends on the load of the LB server. The LB server either allows the client system to directly contact a specific server or provides specific server information on a per session basis [col. 3, lines 49-54] and the communication link is establish and manage by the LB server [col. 7, lines 37-41; 251, Fig. 5; 271, Fig. 6]. In addition, He disclosed a LB server and LBS selector combination [col. 10, lines 33-67; Fig. 7].

9. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have modify He's LB selector (or LB server and LBS selector combination) which has the capability of establishing and routing a communication link between a selected server and a client by identifying the selected server and client to the LB selector, because doing so would dramatically decrease the load off the LB server.

10. Furthermore, He does not specifically teach selecting by the second load balancing server the first load balancing server to receive a request from a client to perform a processing, and that the load balancing slave sever receiving the (client) request after the load balancing master server selects the load balancing slave server. However, Zisapel teaches sending an HTTP redirect message from the first load balancer/server farm to the client instructing the client to reroute the request to the second load balancer/server farm indicated in the redirect message [Zisapel, col. 1, lines 49-53] and forwarding the request from a first load balancer to a second load balancer [Zisapel, col. 2, lines 20-39; 26, 28, 16, Figs. 1A and 1C; col. 5, lines 32-38, 58-66].

11. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of He with the teaching of Zisapel because the teaching of Zisapel can further enhance the teaching of He by providing a failover/offloading mechanism from an overloaded server farm to another server farm capable of handling the request [Zisapel, col. 1, lines 44-49].

12. As to claims 7-8, He as modified teaches the invention substantially as claimed including receiving a plurality of load metrics that originate from the plurality of processing servers at the second load balancing server and encoding the at least one load metric in the request [col. 4, lines 6-12].

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13. As to claims 9-10, He as modified teaches the invention substantially as claimed including wherein the first load balancing server is a load balancing slave [15, Fig. 1], and wherein the second load balancing server is a load balancing master [17a, 17b, Fig. 1].

14. As to claims 14-17, these are data processing system claims that correspond to the method claims 5, 7, and 9-10. Therefore, they are rejected for the same reason as claims 5, 7, and 9-10 above.

15. As to claims 22, and 24-25, these are computer readable medium claims that correspond to the method claims 5, and 7-8. Therefore, they are rejected for the same reason as claims 5, and 7-8 above.

16. As to claim 1, this claim is rejected as claim 5 above.

17. As to claims 2 and 6, these claims are rejected for the same reason as claims 1 and 5 above.

18. As to claims 3-4, these claims are rejected for the same reason as claims 7-8 above.

19. As to claims 11-13, these are data processing system claims that correspond to the method claims 1, and 3-4. Therefore, they are rejected for the same reason as claims 1, and 3-4 above.

20. As to claims 18-21, these are computer readable medium claims that correspond to the method claims 1-4. Therefore, they are rejected for the same reason as claims 1-4 above.

21. As to claim 23, this is a computer readable medium claim that corresponds to the method claim 6. Therefore, it is rejected for the same reason as claim 6 above.

22. As to claim 26, this is a load balancer claim that corresponds to the method claim 1. Therefore, it is rejected for the same reason as claim 1 above.

Response to Arguments

23. Applicant's arguments filed 3/19/07 have been fully considered but they are not persuasive.

24. In the remarks, Applicant argued in substance that:

a. The claimed invention can be compared to "You receive the client's request and then forward it to me" where as Zisapel teaches "I am not available to receive your request, sent it to another load balancing server instead."

25. Examiner respectfully traversed Applicant's remarks:

26. As to point (a), the examiner respectfully disagrees with applicant's analogy above. As pointed out in the 112 2nd paragraph rejection above, the request received from the client does not correspond to the request sent from the load balancing slave server to the load balancing master, therefore applicant's argument is not persuasive. In addition, the Examiner hereby reiterate the teaching of Zisapel as being addressed in the Advisory Action mailed on 12/13/06, Zesapel teaches LB1 receiving the client's request [26, 28, 16, Figs. 1A and 1C; col. 5, lines 32-38], LB1 decided that client's request should be forwarded to LB2 (LB1 selecting LB2), substitutes the destination IP address of request with virtual IP of LB2 and sends the client request to LB2 (LB2 receiving the request after being selected by LB1) [col. 5, lines 58-66; Figs. 1A and 1C].

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The examiner can normally be reached on 8:30am-6:00pm Monday-Thursday and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR


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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Qing-Yuan Wu

Examiner

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WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER